Claim \(\frac{1}{3}\) (amended)

A copper chromite catalyst having the molar composition

$$Cu_{(a)}Cr_{(b)}Al_{(c)}Zn_{(d)}$$

wherein

a = 10 - 40 mole %

b = 10 - 40 mole %

c = 10 - 30 mole %

d = 5 - 40 mole %

and
$$a + b + c + d = 100$$

and having an XRD pattern as shown in Table I.

Table I: XRD analysis of the copper chromite catalyst

F

50150

- 0 0	Intensity (%)
18.	100
26.2	100
27.4	48
35.8	92
44.2	48
56.6	44

Claim § (amended)

A process for the preparation of a copper chromite catalyst having

the molar composition

$$Cu_{(a)}Cr_{(b)}Al_{(c)}Zn_{(d)}$$

wherein

a = 10 - 40 mole %

b = 10 - 40 mole %

c = 10 - 30 mole %

d = .5 - 40 mole %

and
$$a + b + c + d = 100$$

and having an XRD pattern as shown in Table I

Table I: XRD analysis of the copper chromite catalyst

-0 0	Intensity (%)
18.	100
26.2	100
27.4	48
35.8	92
44.2	48
56.6	44

said process comprising the steps of:

- (a) preparing an aqueous solution comprising a source of copper, a source of aluminum and a source of zinc;
- (b) adding to the aqueous solution of step (a) a source of chromium while stirring to form a precipitate;
- recovering the precipitate and calcining the precipitate at a temperature between (c) 200 - 500°C for a period between 2 - 5 hours to obtain the catalyst.

Please add the following new claims.

18. (New)

A process as claimed in claim 8, wherein the source of aluminum is a chloride salt of aluminum.

9 **M**. (New)

A process as claimed in claim & comprising drying the precipitate

